

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

GENERAL POWER OF ATTORNEY
PCT Rule 90.5

I, JOHAN RICHAUD hereby appoint the following persons as my agents:

James R. Williams Reg. No. 43,268
of Jamison, Seltzer, Harper & Williams
2625 Wilmington Road
New Castle, PA 16105
tel: 724-652-0821
fax: 724-652-7984
email: jrwlaw@adelphia.net

and

Donald M. Satina Reg. No. 31,875
of Vesuvius USA Corporation
27 Noblestown Road
Carnegie, PA 15106
tel: 412-276-1750 ext. 252
fax: 412-276-7252
email: jim.williams@vesuvius.com

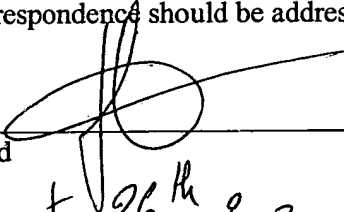
to represent me with any and all international applications filed by me with the United States Patent and Trademark Office as Receiving Office and to make payments or receive payments on my behalf.

All future correspondence should be addressed to Donald M. Satina.



Johan Richaud

Date



August 26th 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

GENERAL POWER OF ATTORNEY
PCT Rule 90.5

VESUVIUS CRUCIBLE COMPANY, a corporation of the State of Delaware,
is the owner of worldwide rights for the above-referenced invention by assignment
from the inventor(s), and hereby appoints the following persons as its agents:

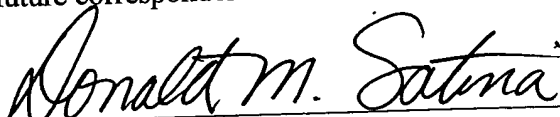
James R. Williams Reg. No. 43,268
of Jamison, Seltzer, Harper & Williams
2625 Wilmington Road
New Castle, PA 16105
tel: 724-652-0821
fax: 724-652-7984
email: jrwlaw@adelphia.net

and

Donald M. Satina Reg. No. 31,875
of Vesuvius USA Corporation
27 Noblestown Road
Carnegie, PA 15106
tel: 412-276-1750 ext. 252
fax: 412-276-7252
email: jim.williams@vesuvius.com

to represent it with any and all international applications filed by it with the United
States Patent and Trademark Office as Receiving Office and to make payments or
receive payments on my behalf.

All future correspondence should be addressed to Donald M. Satina.



Donald M. Satina, Secretary

August 26, 2003
Date